

Appl. No. 10/017,120
Amdt. Dated Jan. 23, 2004
Reply to Office Action of October 23, 2003

Remarks

Priority

Applicants have filed a certified copy of the Taiwan application as required by 35 U.S.C. 119(b), in support of applicants' claim for foreign priority based on the application filed in Taiwan on November 28, 2001.

Claim Rejections under 35 U.S.C. 102

Claims 1 and 3-19 are rejected under 35 U.S.C. 102 (b) as being anticipated by Roth et al. (US 6,081,647).

In response to this rejection, applicants have added the subject matter of claim 3 into independent claim 1, and have amended claim 1 to include the shutter being flexible. Applicants have also cancelled claim 3 without prejudice, and have amended claim 4 to depend from amended claim 1. Applicants submit that amended claim 1 is patentable over Roth et al, for the following reasons.

As described in paragraph [0025] of the current application, *the shutter 331 can be made from an elastoplastic polymer material*. The ordinary artisan knows that elastoplastic polymer material is flexible; that is, that the shutter 331 is flexible. Paragraph [0025] also details that *the shutter 331 can undergo deformation when an external force is applied thereto, and can restore to its relaxed state when the external force is removed*. This also indicates that the shutter 331 is flexible. Therefore the recitation in amended claim 1 as to the shutter being flexible is not new matter.

Regarding amended claim 1, *the door (further) comprises a flexible shutter*. Roth et al. discloses a shutter that is made of a dielectric material such as plastic or the like, but does not disclose a shutter that is flexible.

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The present invention is clearly different from the cited prior art, and applicants request that the rejection as to independent claim 1 be removed.

Claims 2 and 4-14 are also believed to be patentable, since they depend directly or indirectly from independent claim 1.

Applicants have also amended independent claim 15 so it includes the recitation that *the spring device is in a relaxed state until the door is moved to its half way toward the wall*, in order to patentably distinguish the claimed invention over Roth et al.

First referring to FIG. 4 of the current application, the spring member (not labeled in FIG. 4) is in the natural state when the door is closed. Next referring to FIG. 6, the spring member 333 is also in the natural state while the plug 5 is being inserted into the housing 35. Then referring to FIG. 7, only when the plug 5 has been fully inserted in the housing 35, is the spring member 333 deformed. In another embodiment, referring to FIG. 9, the conditions are similar. Thus the recitation that *the spring device is in a relaxed state until the door is moved to its half way toward the wall*, is clearly shown in the specification/drawings, and is not new matter.

Referring to FIG. 5 of Roth et al., the spring device thereof is generally deformed by the pressure coming from the housing, even if the door is closed and the plug is out of the housing. Therefore the present invention is very different from that of Roth et al.

Moreover, claim 15 further defines said door being configured to be able to be inwardly bent about the end thereof rather than be pivoted about said end when said plug is inserted into the insertion hole. *In the invention the resumption of the door is mainly/constantly derived from inherent elasticity of the deflectable door and*

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auxiliarily/partially from the restoration of spring device which only joins on the second half session of movement of the door. Differently, in Roth et al. the resumption of the door is totally derived from the torsion spring (58) during the whole session of movement of the door, and this is the reason why the door (28, 30) should be pivotal rather than be bendable.

The present invention is clearly different from the cited prior art, and applicants request that the rejection as to independent claim 15 be removed.

Claims 16-18 are also believed to be patentable, since they depend from independent claim 15.

Claim Rejections under 35 U.S.C. 103

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth.

In response to this rejection, applicants traverse as follows. Claim 2 depends from amended claim 1, and applicants submit that amended claim 1 is not only novel over Roth et al, but also unobvious under 35 U.S.C. 103 in view of Roth et al (US 6,081,647), Abendschein et al. (US 6,004,043), Roth (US 6,240,229), and Shimoji et al. (US 6,352,375), as follows.

As asserted above, Roth et al does not disclose "*a flexible shutter.*" In addition, all of Abendschein, Shimoji and Roth fail to disclose this feature. Roth et al. use a single shutter member or door made of a dielectric material such as *plastic or the like*. Abendschein uses a shutter plate. Shimoji uses a wedge-shaped, springy or elastic material shutter. Roth uses a single member shutter. In contrast, the present invention utilizes a *flexible shutter* to cover an inlet side of the inserting

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hole. The flexible characteristic is manifest in that the shutter is *bent* inwardly into the inserting hole of the housing by insertion of a fiber plug, and restores when the force is removed. Roth et al., Abendschein, Shimoji and Roth fail to suggest any such effectively flexible shutter as recited in amended claim 1. Rather, Roth et al., Abendschein, Shimoji and Roth simply employ a different means to make the door to bend and restore; that is, *a spring member*. The door attached on the spring member bends according to the deformation of the spring. Therefore, amended claim 1 is unobvious over Roth et al., Abendschein, Shimoji and Roth or any combination thereof.

In summary, the present invention's shutter is *not only structurally differently, but also functionally distinctly differently from the shutter of Roth et al., Abendschein, Shimoji and Roth's or any combination thereof*. Therefore, amended claim 1 should be allowed. Accordingly, claim 2, which depends from amended claim 1, should also be allowed.

Similarly, claims 4-14 should also be allowed, since they depend directly or indirectly, from independent claim 1.

Claims 15-18 are rejected under 35 U.S.C. 102, and this rejection is traversed as above. Applicants further assert that claims 15-19 are also patentable under 35 U.S.C. 103 over Roth et al., Abendschein, Shimoji and Roth, as follows:

Regarding amended claim 15, as asserted above, Roth et al. fails to disclose that *"the spring device is in a relaxed state when no plug is inserted in the insertion hole."* In addition, all of Abendschein, Shimoji and Roth fail to disclose this feature. Referring to FIG. 5 of Roth et al. and FIG. 3 of Abendschein, the spring devices thereof are *generally deformed* by the pressure coming from the housing and the

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door. Referring to FIG. 5 of Roth, the spring device thereof is *generally deformed* by the pressure coming from the housing, even if the door is closed and the plug is out of the housing. Compare this with the present invention, which utilizes a spring device that *is in a relaxed state when no plug is inserted in the housing*. In this position, the flexible shutter covers the opening with no force exerted from the spring. All of Roth et al., Abendschein and Roth fail to suggest such a characteristic. Rather, Roth et al., Abendschein and Roth uses a different means to make the door cover the opening. There's a spring device attached to the door. When no plug is inserted in the housing, the door covers the opening of the housing only by means of the restoring force applied by the spring. Referring to FIG. 7A of Shimoji, this reference also fails to suggest the unique feature of amended claim 15, since the door of Shimoji does not cover the opening when no plug is inserted in the housing. Compare this with amended claim 15, which recites *a door* having an end fixed to the housing around said front opening and *covering said front opening when no plug is inserted into the insertion hole*. Therefore, amended claim 15 is unobvious over Roth et al., Abendschein, Shimoji and Roth or any combination thereof, and should be allowed.

Claims 16-18 are also believed to be patentable, since they depend from independent claim 15.

In view of the above claim amendments and remarks, the subject application is believed to be in a condition for allowance, and an action to such effect is earnestly solicited.

Respectfully submitted,

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